

Notice of Allowability**Application No.**

10/799,543

Applicant(s)

HAN ET AL.

Examiner

ARISTOCRATIS FOTAKIS

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 07/14/2010.
2. ☒ The allowed claim(s) is/are 1, 4-7, 10-14, 16-17, 20-21, 23-24 and 26.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date ____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 08/27/2010.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other ____.

/Aristocratis Fotakis/
Examiner, Art Unit 2611

DETAILED ACTION

Examiner's Amendment

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr William E. Hunter on August 26, 2010.

The application has been amended as followed:

In claim 1, the limitation "wherein said determining ignores a gain factor of the target polynomial" in lines 16 - 17 must be changed to -- wherein when there is uncertainty about the gain of the partial response channel, the target polynomial is scaled by a gain factor, and said determining ignores the gain factor--.

In claim 7, the limitation "wherein said determining ignores a gain factor of the target polynomial" in lines 17 - 18 must be changed to -- wherein when there is uncertainty about the gain of the partial response channel, the target polynomial is scaled by a gain factor, and said determining ignores the gain factor--.

In claim 13, the limitation "wherein the branch metric generator ignores a gain factor of the target polynomial" in lines 12 - 13 must be changed to -- wherein when there is uncertainty about the gain of the partial response channel, the target polynomial is scaled by a gain factor, and the branch metric generator ignores the gain factor--.

In claim 17, the limitation "wherein said means for determining ignores a gain factor of the target polynomial" in lines 13 - 14 must be changed to -- wherein when there is uncertainty about the gain of the partial response channel, the target polynomial is scaled by a gain factor, and said means for determining ignores the gain factor--.

In claim 21, the limitation "and wherein the Viterbi detection means ignores a gain factor of a target partial response of partial response channel to which the sampled channel sequence corresponds" in lines 9 - 13 must be changed to – wherein the sampled channel sequence corresponds to a partial response channel having a target partial response; and wherein when there is uncertainty about the gain of the partial response channel, the target partial response is scaled by a gain factor, and said Viterbi detection means ignores the gain factor --.

In claim 24, the limitation "and wherein the Viterbi detection means ignores a gain factor of a target partial response of partial response channel to which the sampled channel sequence corresponds" in lines 9 - 13 must be changed to – wherein the sampled channel sequence corresponds to a partial response channel having a target

partial response; and wherein when there is uncertainty about the gain of the partial response channel, the target partial response is scaled by a gain factor, and said Viterbi detection means ignores the gain factor --.

Allowable Subject Matter

Claims 1, 4 -7, 10 - 14, 16 - 17, 20 - 21, 23 - 24 and 26 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Re independent claims 1, 7, 13 and 17, the prior art of record does not disclose of "determining an input sequence of the partial response channel by maximizing cross-correlation of an estimated output sequence with the obtained output sequence and all survivor paths associated with all the 2^M states in the trellis merge in M steps; and wherein when there is uncertainty about the gain of the partial response channel, the target polynomial is scaled by a gain factor, and said determining ignores the gain factor".

Re independent claims 21 and 24, the prior art of record does not disclose of "Viterbi detection means for maximizing cross-correlation of the recovered sequence and the sampled sequence and wherein the sampled channel sequence corresponds to a partial response channel having a target partial response; and wherein when there is

uncertainty about the gain of the partial response channel, the target partial response is scaled by a gain factor, and said Viterbi detection means ignores the gain factor.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aristocratis Fotakis whose telephone number is (571) 270-1206. The examiner can normally be reached on Monday - Friday 07:00 - 16:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh M. Fan can be reached on (571) 272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Aristocratis Fotakis/

Application/Control Number: 10/799,543
Art Unit: 2611

Page 6

Examiner, Art Unit 2611

/CHIEH M FAN/

Supervisory Patent Examiner, Art Unit 2611